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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/628,431	07/29/2003	Ulrich Wegmann	Q76579	5290
23373	7590	02/15/2006	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037				TURNER, SAMUEL A
			ART UNIT	PAPER NUMBER
			2877	

DATE MAILED: 02/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/628,431	WEGMANN ET AL.	
	Examiner Samuel A. Turner	Art Unit 2877	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 06 January 2006.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) 7 and 15-26 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-6,8-14 and 27 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 29 July 2003 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/29/03.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

## DETAILED ACTION

### *Election/Restrictions*

Applicant's election without traverse of claims 1-6, 8-14, and 27 in the reply filed on 6 January 2006 is acknowledged.

### *Preliminary Amendments*

The preliminary amendment filed 20 May 2004 has been entered.

### *Title*

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### *Drawings*

The drawings are objected to because figures 3 and 11 contain German legends. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application.

### **Replacement Drawing Sheets**

Drawing changes must be made by presenting replacement sheets which incorporate the desired changes and which comply with 37 CFR 1.84. An explanation of the changes made must be presented either in the drawing amendments section, or remarks, section of the amendment paper. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). A replacement sheet must include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of the amended drawing(s) must not be labeled as "amended." If the changes to the drawing figure(s) are not accepted by the examiner, applicant will be notified of any required corrective action in the next Office action. No further drawing submission will be required, unless applicant is notified.

Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and within the top margin.

#### Annotated Drawing Sheets

A marked-up copy of any amended drawing figure, including annotations indicating the changes made, may be submitted or required by the examiner. The annotated drawing sheet(s) must be clearly labeled as "Annotated Sheet" and must be presented in the amendment or remarks section that explains the change(s) to the drawings.

#### Timing of Corrections

Applicant is required to submit acceptable corrected drawings within the time period set in the Office action. See 37 CFR 1.85(a). Failure to take corrective action within the set period will result in ABANDONMENT of the application.

If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings MUST be filed within the THREE MONTH shortened statutory period set for reply in the "Notice of Allowability." Extensions of time may NOT be obtained under the provisions of 37 CFR 1.136 for filing the corrected drawings after the mailing of a Notice of Allowability.

#### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-6, 8-14, and 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-6, 8-14, and 27 are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

In claim 1 there is not relationship between “the optical system under test” and “an optical imaging system”. Further in claims 1-3, there is no antecedent basis for “the imaging system”.

In claims 9-11, there is no antecedent basis for “upstream first polarization means”.

With regard to claims 9 and 12, these claims define a polarization means as “upstream” but are confusing in that the claims never define specifically where these separate polarization means are located.

*Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 8, 14, and 27 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Ouchi(2002/0024673).

FIG. 1

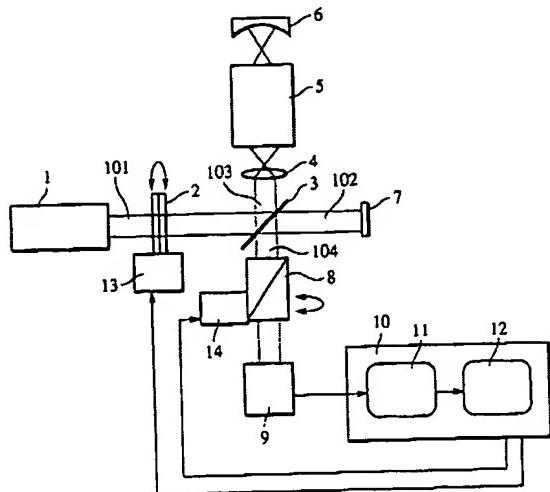
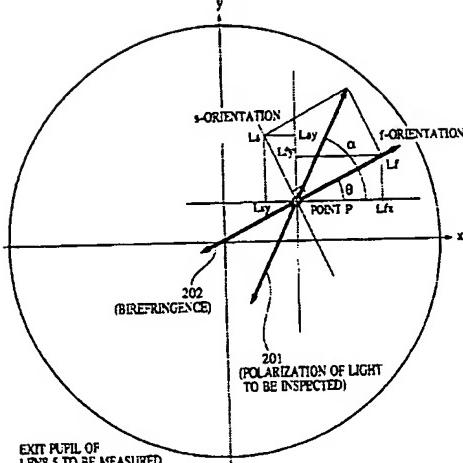


FIG. 2



With regard to claim 1, Ouchi teaches a method for determining the influencing of the state of polarization of optical radiation by an optical system under test, in which

entrance-side radiation with a defined entrance state of polarization is directed onto the optical system (1,2, paragraph [0012]),

the exit state of polarization is measured by radiation emerging from the optical system(8.9, paragraph [0012]), and

the influencing of the state of polarization by the optical system is determined by means of evaluating the measured exit state of polarization with reference to the entrance state of polarization (102, 103, paragraph [0012]).

wherein the influencing of the state of polarization caused by an optical imaging system of prescribable aperture is determined with pupil resolution(paragraph [0015]).

As to claim 2, wherein the defined entrance state of polarization is provided in an object plane of the imaging system, and the exit state of polarization is measured with pupil resolution within a prescribable pupil range of the imaging system(paragraphs [0012],[0015]).

With regard to claim 8, Ouchi teaches an apparatus for determining the influencing of the state of polarization of optical radiation by an optical system under test, having

means for providing entrance-side radiation, directed onto the optical system, with a defined entrance state of polarization(1,2, paragraph [0012]), polarization detector means for measuring the exit state of polarization of radiation emerging from the optical system(8,9, paragraph [0012]), and an evaluation unit for determining the influencing of the state of polarization by the optical system by means of evaluating the measured exit state of polarization with reference to the entrance state of polarization(10, paragraph [0012]),

wherein the polarization detector means are configured to measure the exit state of polarization with pupil resolution, and the evaluation unit is configured to determine the influencing of the state of polarization with pupil resolution.

As to claim 14, wherein the evaluation unit is configured for determining the phase-reduced or complete, pupil-resolved Jones matrix(10, paragraph [0012]).

With regard to 27, Ouchi teaches a test apparatus comprising:

a source of entrance-side radiation, directed onto an optical system, with a defined entrance state of polarization(1,2, paragraph [0012]),

a polarization detector configured to measure the exit state of polarization of radiation emerging from the optical system with pupil resolution(8,9, paragraph [0012]), and

an evaluation unit configured to evaluate the measured exit state of polarization with reference to the entrance state of polarization with pupil resolution(10, paragraph [0012]).

The remaining claim limitations found in claims 8, 14, and 27 are functional limitations and these limitations can be met by the prior art if the structure of the prior art is capable of performing the claimed functions.

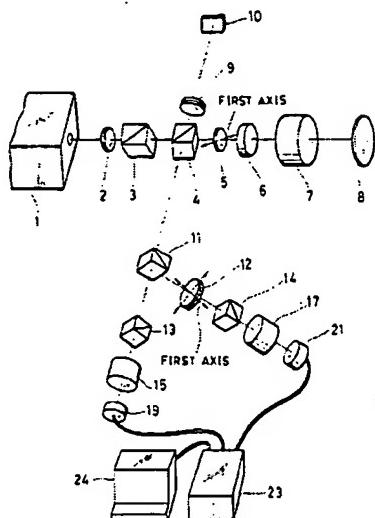
***2114 [R-1] Apparatus and Article Claims — Functional Language***

**APPARATUS CLAIMS MUST BE STRUCTURALLY DISTINGUISHABLE FROM THE PRIOR ART**

While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. In re Schreiber, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997) (The absence of a disclosure in a prior art reference relating to function did not defeat the Board's finding of anticipation of claimed apparatus because the limitations at issue were found to be inherent in the prior art reference); see also In re Swinehart, 439 F.2d 210, 212-13, 169 USPQ 226, 228-29 (CCPA 1971); In re Danly, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959). "[A]pparatus claims cover what a device is, not what a device does." Hewlett-Packard Co. v. Bausch & Lomb Inc., 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990) (emphasis in original).

Claims 1-3, 8, 12, 14, and 27 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Ohuchi(4,798,468).

FIG. 1



With regard to claim 1, Ohuchi teaches a method for determining the influencing of the state of polarization of optical radiation by an optical system under test, in which

entrance-side radiation with a defined entrance state of polarization is directed onto the optical system(1-3, column 2, lines 54-61),  
the exit state of polarization is measured by radiation emerging from the optical system(19,21, column 4, lines 55-68), and

the influencing of the state of polarization by the optical system is determined by means of evaluating the measured exit state of polarization with reference to the entrance state of polarization(column 3, lines 21-59),

wherein the influencing of the state of polarization caused by an optical imaging system of prescribable aperture is determined with pupil resolution (column 4, lines 55-68).

As to claim 2, wherein the defined entrance state of polarization is provided in an object plane of the imaging system, and the exit state of polarization is measured with pupil resolution within a prescribable pupil range of the imaging system (column 2, lines 54-61; column 4, lines 55-68).

As to claim 3, wherein a spatially incoherent point light radiation emanating from the object plane of the imaging system is provided as entrance-side radiation (1, column 7, line 1).

With regard to claim 8, Ohuchi teaches an apparatus for determining the influencing of the state of polarization of optical radiation by an optical system under test, having

means for providing entrance-side radiation, directed onto the optical system, with a defined entrance state of polarization (1-3, column 2, lines 54-61), polarization detector means for measuring the exit state of polarization of radiation emerging from the optical system (12-14, 19, 21; column 4, lines 55-68), and an evaluation unit for determining the influencing of the state of polarization by the optical system by means of evaluating the measured exit state of polarization with reference to the entrance state of polarization (23, 24, column 3, lines 21-59),

wherein the polarization detector means are configured to measure the exit state of polarization with pupil resolution, and the evaluation unit is configured to determine the influencing of the state of polarization with pupil resolution(column 4, lines 55-68).

As to claim 12, wherein the polarization detector means include a CCD detector and upstream second polarization means(column 4, lines 55-68).

As to claim 14, wherein the evaluation unit is configured for determining the phase-reduced or complete, pupil-resolved Jones matrix(23,24, column 3, lines 21-59).

With regard to claim 27, Ohuchi teaches a test apparatus comprising:  
a source of entrance-side radiation, directed onto an optical system, with a defined entrance state of polarization(1-3, column 2, lines 54-61),  
a polarization detector configured to measure the exit state of polarization of radiation emerging from the optical system with pupil resolution(12-14,19,21; column 4, lines 55-68), and  
an evaluation unit configured to evaluate the measured exit state of polarization with reference to the entrance state of polarization with pupil resolution(23,24, column 3, lines 21-59).

The remaining claim limitations found in claims 8, 14, and 27 are functional limitations and these limitations can be met by the prior art if the structure of the prior art is capable of performing the claimed functions.

***2114 [R-1] Apparatus and Article Claims — Functional Language***

**APPARATUS CLAIMS MUST BE STRUCTURALLY DISTINGUISHABLE FROM THE PRIOR ART**

While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. In re Schreiber, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997) (The absence of a disclosure in a prior art reference relating to function did not defeat the Board's finding of anticipation of claimed apparatus because the limitations at issue were found to be inherent in the prior art reference); see also In re Swinehart, 439 F.2d 210, 212-13, 169 USPQ 226, 228-29 (CCPA 1971); In re Danly, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959). "[A]pparatus claims cover what a device is, not what a device does." Hewlett-Packard Co. v. Bausch & Lomb Inc., 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990) (emphasis in original).

***Relevant Prior Art***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Biegen(4,732,483), Wu et al(4,762,417), Ohuchi(4,798,468), and Otaki(2002/0044287).

*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samuel A. Turner whose phone number is 571-272-2432.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr., can be reached on 571-272-2800 ext. 77.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Samuel A. Turner  
Primary Examiner  
Art Unit 2877